

TWO NEW ASIATIC PRIMULAS OF THE MALACOIDES SECTION

C. M. Hu*

ABSTRACT. Two new species of *Primula* L. in section Malacoides are described, *P. caulifera* C. M. Hu from Thailand and *P. runcinata* [W. W. Smith & Fletcher ex] C. M. Hu from west China; affinities with allied species and the possible hybrid origin of *P. inopinata* Fletcher are discussed.

***Primula caulifera* C. M. Hu, sp. nov.** (Sect. Malacoides Balf. f.). Fig. 1.

Species caulibus elongatis valde distincta cujus affinitas est cum *P. malacoides* Franch. et *P. duclouxii* Petitm., a quibus floribus multo minoribus, corollae tubo calycem paulum superante praeter alia signa distinguitur.

Herba caulescens. Caulis 14-27cm longus, basi tenuior et debilis, deinde ascendens usque 1.5-2mm crassus, spadiceus, pilis articulatis patentibus pallidis breviter villosis, 1-1.5mm longis densius obsitus. Internodia 5-15mm longa. Folia alterna, apicem versus subconferta, subaequalia, ovato-oblonga vel oblonga, 4-6cm longa et 3-4cm lata, apice obtusa, basi breviter cordata, margine paulo sinuato-lobulata, lobulis inaequaliter acute dentatis, textura in sicco tenuissima, pilis articulatis albidis subtus quam supra densioribus obsita. Petiolus laminam subaequans longiuscule albido-pilosus. Scapi 2-3, 7.5-15cm alti, graciles, inferne albido-pilosi umbellas superpositas 3-4 intervallis 1-2cm longis plurifloras (5-10) gerentes; bractae lineares 4-6mm longae glabrae; pedicelli 10-14mm longi, glabri. Calyx ad 4mm longus campanulatus extra albo-farinosus in lobos anguste triangulares acutos ad medium fissus. Corolla rosea, tubus 4.5mm longus, cylindricus, glaber, flavidus, vix annulatus, lobi 3mm longi obcuneati, apice emarginati. Stamina in floribus longistylis infra medium tubi corollini inserta. Ovarium globosum; stylus longus inclusus et calyce paulo brevior. Fructus deest.

Type: Thailand, Chaiyaphum Dist, Tunkamang, 16°20'N, 101°45'E, alt. 800m, moist savannah, near edge of dry evergreen forest, 17 xii 1971, C. F. van Beusekom, C. Phengkhlay, R. Geesink & B. Wongwan 4378 (holo. P, iso. K).

A very distinct species easily recognized by its elongate stem, alternate leaves and short corolla tube. It is not likely to be confused with other species and is widely separated geographically from the general distribution area of section Malacoides to which it belongs.

PRIMULA RUNCINATA

The description of *Primula runcinata* and the discussion which follows comes directly from a manuscript written and signed by the late Prof. H. R. Fletcher and lodged with the specimens in the Edinburgh herbarium. The only alterations I have made are in the typification: Fletcher proposed the

* South China Institute of Botany, Guangzhou, China.

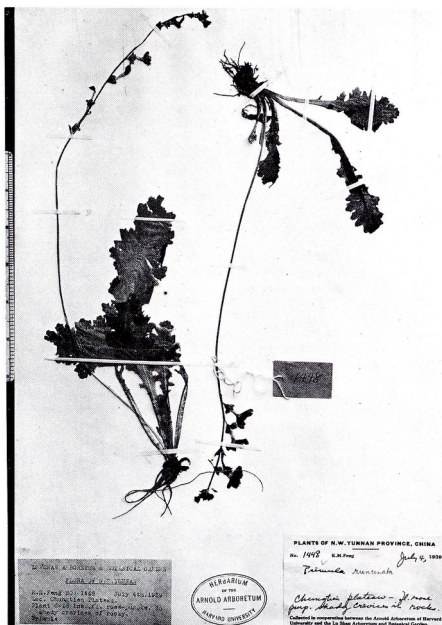


FIG. 1. *Primula caulifera* C. M. Hu: A, habit; B, corolla, opened-out; C, calyx; D, gynoecium; E, androecium.

Arnold Arboretum specimen as holotype, whereas I prefer the one known to me—that at Peking. I have also provided the synonymy.

The Leningrad Code recommends that one should avoid adopting unpublished names found on herbarium specimens (Rec. 23B(i)) but in the circumstances, when all the information was present and ready for publication, I have made an exception.

Primula runcinata [W. W. Smith & Fletcher ex] C. M. Hu, **sp. nov.** (Sect. *Malacoides* Balf. f.). Fig. 2.

Syn.: *P. aromatica* sensu W. W. Smith & Fletcher in Trans. Roy. Soc. Edinb. 61: 446 (1946), p.p. quoad *T. T. Yu* 13861.

[*P. nasturtiifolia* Chen & C. M. Hu in sched.]

Species affinis *P. aromatica* W. W. Smith & Forrest, a qua habitu elatiore, foliis elongatis runcinatis inter alia signa differt.

Planta perennis gracilis fragilis 10–35cm alta, rhizomate brevissimo satis robusto radices carnosulas emittente. Folia petiolo incluso 5–20cm longa, in sicco tenuiter membranacea; lamina 2.5–10cm longa, 1.5–5cm lata, elliptica vel oblongo-elliptica vel nunc subovata, ambitu apice rotundata, irregulariter runcinato-lobata, lobis ipsis iterum lobulatis vel obtuse dentatis ad basin remotis paucis multo minoribus, in petiolum haud discretum attenuata, utrinque glabra, costa media lata conspicua subtus pilosula excepta; nervi laterales 5–6 paria, gracillimi, nervatione obscura; petiolus laminam plus minusve aequans, late alatus, basi vaginatus, glaber vel pilis paucis munitus. Scapus 10–35cm altus, gracilis, glaber vel paulo pubescens, racemum 2–10-florum gerens, floribus inter se 1–2cm distantibus; bracteae 5–10mm longae, oblongae vel oblanceolatae, glabrae; pedicelli 1–4mm longi, plerumque c.2mm longi. Calyx 5–6mm longus, subfoliaceus, glaber, ad medium vel ultra in lobos ovatos obtusos vel apice rotundatos nunc paulo imbricatos, margine minute ciliolatos fissus. Corolla roseopurpurea (ex collectore), exannulata, heteromorpha; tubus calyce triplo longior, cylindricus, glaber, ut videtur flavus; limbus 1–2cm diametro, lobis obcordatis paulo emarginatis. Stamina antheris 1.5mm longis in floribus longistylis calycem ad insertionem 5–6mm superantia; in floribus brevistylis ad partem tubi tertiam superiorem posita. Stylus longus duas partes tubi aequans vel ultra; stylus brevis calycem aequans. Capsula globosa, calyce inclusa. Fructus deest.

Type: China, Yunnan, Chongdien plateau, flowers rose-purple, shady crevices in rocks, 4 vii 1939, *K. M. Feng* 1448 (holo. PE; iso. A, photo. E). Other specimens: Chongdien, Chiren, under forest, rocky place, 3100m, 6–8 in, rare, 24 x 1937, *T. T. Yu* 13861 (E); sine loc., *T. T. Yu* 12380 (E).

This plant is clearly near *P. aromatica*, but most obviously differs in the runcinate leaves, taller stature, and longer inflorescence. In both species the inflorescence is of the spicate-racemose type, inclining more towards the raceme than the spike. *P. aromatica* is the more hairy of the two species. There are differences moreover in the structure of the calyx, the lobes of which in *P. aromatica* are of the lanceolate to oblong type, usually acute at the apex, whereas those of *P. runcinata* are ovate and obtuse or even round at the apex, sometimes overlapping at the base.

Both plants have the same fragility, a result no doubt of growing in the

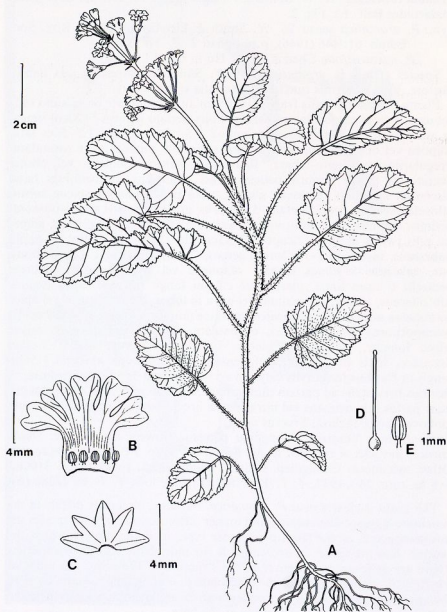


FIG. 2. *Primula runcinata* [W. W. Smith & Fletcher ex] C. M. Hu. K. M. Feng 1448, isotype.

moist shady crevices of rocks. It was largely on account of this fragility that W. W. Smith & Fletcher placed *P. aromatica* in section Malacoides, near to *P. pellucida* and *P. cavaleriei*. But in section Malacoides, *P. aromatica* is anomalous in that its inflorescence is spicate-racemose, whereas those of the rest of the section are umbellate. (There is the same anomaly in section Muscarioides where *P. inopinata** has its flowers on a loose interrupted raceme, whereas the rest of the section have flowers in loose spikes or in capitula.)

ACKNOWLEDGEMENTS

I am grateful to Mr D. M. Henderson, Regius Keeper of the RBG, Edinburgh, and Prof. F. Leroy, the Director of the Laboratoire de Phanérogamie, Muséum National d'Histoire Naturelle, Paris, for their hospitality, help and the use of herbarium facilities, and to Mr L. A. Lauener and Dr R. R. Mill for correcting the English text and the Latin description.

* *P. inopinata* Fletcher was described from a cultivated plant raised from seed of *T. T. Yu* 13861 collected from Yunnan, Chongdien. The wild specimen under this number is *P. runcinata* (misidentified as *P. aromatica* by Fletcher until he received better material on loan from the Arnold Arboretum) and consequently Fletcher concluded that the cultivated plant bore no relationship to it. The material now available shows that *P. inopinata* shares characters with *P. runcinata*, especially in the general facies of the inflorescence and leaves, although, as pointed out by Fletcher, it is hairy like *P. pinnatifida*—in many ways it is intermediate between these two species. Considering that it has never been found in the wild, it is possible that it may be a natural hybrid of *P. runcinata* and *P. pinnatifida*.